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APPROVED BY	O.G. FIG.	
	CLASS	SUBCLASS
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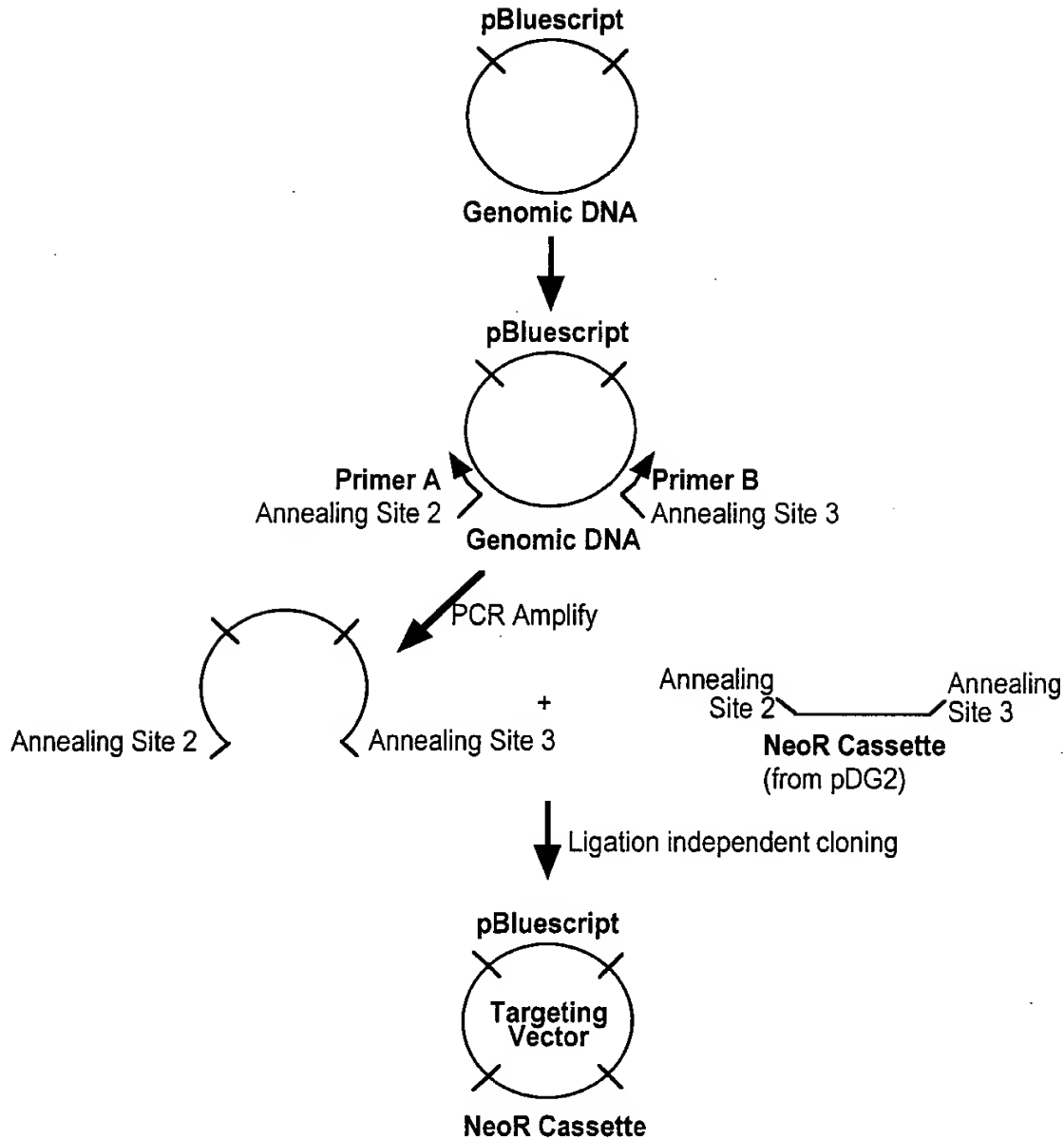
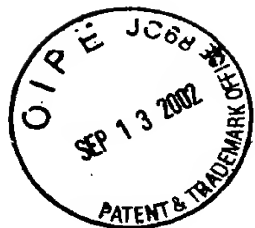
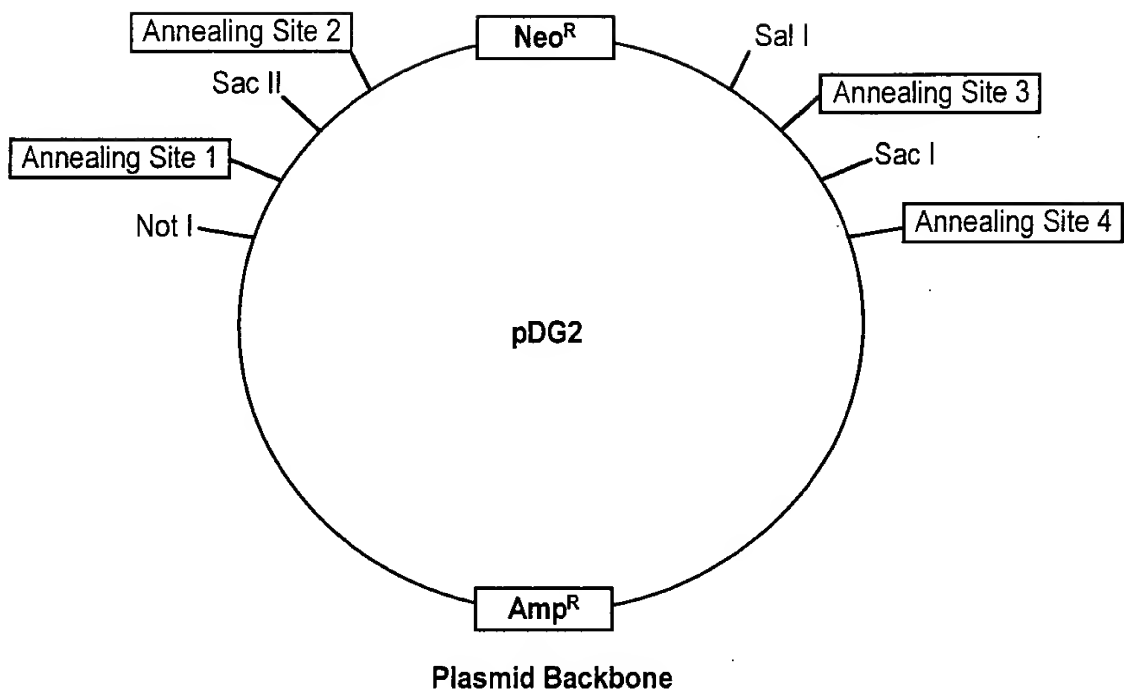


Fig. 1

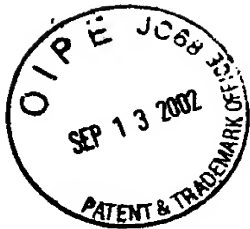


O.G. FIG.		SUBCLASS
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**Fig. 2A**

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Fig. 2B



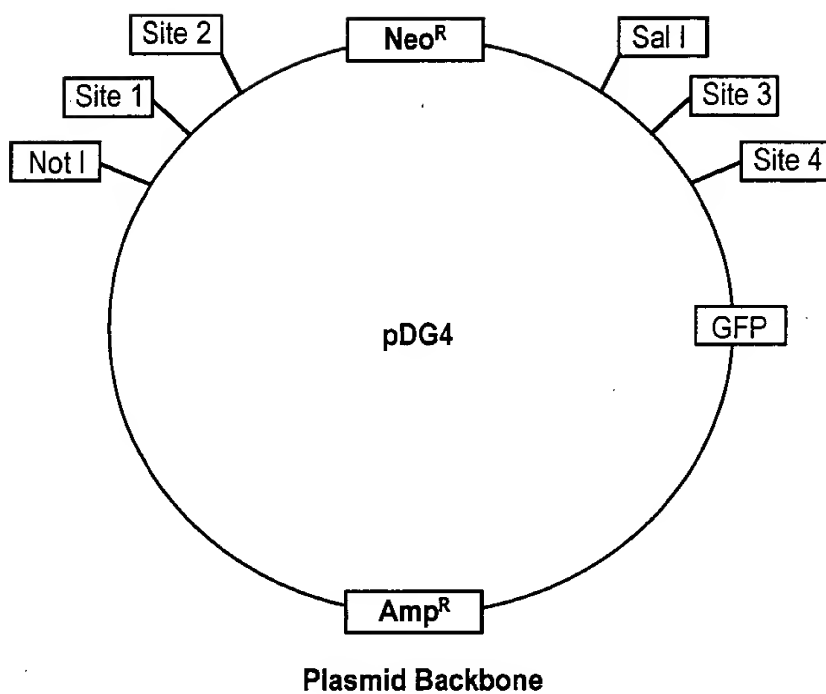
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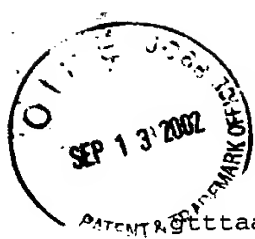
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	CLASS	SUBCLASS



Plasmid Backbone

Fig. 3A



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	CLASS	

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Fig. 3b-1

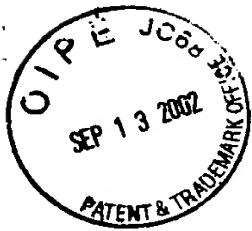


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	CLASS	

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Fig. 3B-2

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		



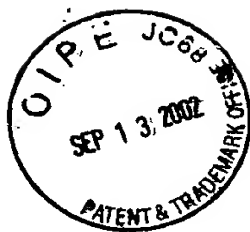
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Annealing Site	Sequence	Sequence after digestion
1	5' tgtgtctctcttttggttgcttccaa... 3' 3' acacgaggagaaacccgaacgaaggtt... 5'	5' tgtgtctctcttttggttgcttccaa... 3' 3' tt... 5'
2	5' ctggttctgtctggttgcccaa... 3' 3' gaccaagaacagaccgaacgggtt... 5'	5' ctggttctgtctggttgcccaa... 3' 3' tt... 5'
3	5' ggtctctgtctgtgtccgttcaa... 3' 3' ccaggagcgagacacaggaactt... 5'	5' ggtctctgtctgtgtccgttcaa... 3' 3' tt... 5'
4	5' ttgctgtctctgtgtgtcgaa... 3' 3' aaacgcacaggacacagcagctt... 5'	5' ttgctgtctctgtgtgtcgaa... 3' 3' tt... 5'

Fig. 4

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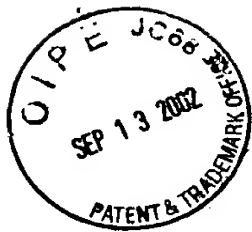
APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		



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Annealing Site	Sequence	Sequence after digestion
1	5' AATgtcctcctcttggcttgcctccgc 3' 3' Ttacacgaggagaaaccgaacgaagg 5'	5' AA 3' 3' Ttacacgaggagaaaccgaacgaagg 5'
2	5' Aactggttcttgtctgtggtggccgc 3' 3' Ttgaccaagaacagaccgaaccggg 5'	5' AA 3' 3' Ttgaccaagaacagaccgaaccggg 5'
3	5' AAGgtcctcgtctgtgtccgttgagct 3' 3' Ttccaggagcgagacacaggcaac 5'	5' AA 3' 3' Ttccaggagcgagacacaggcaac 5'
4	5' AAttgctgtctgtgtcgtcgagct 3' 3' Ttaaacgcacaggaacacagcagc 5'	5' AA 3' 3' Ttaaacgcacaggaacacagcagc 5'

Fig. 5



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APPROVED BY DRAFTSMAN	O.G. FIG.		SUBCLASS
	CLASS		

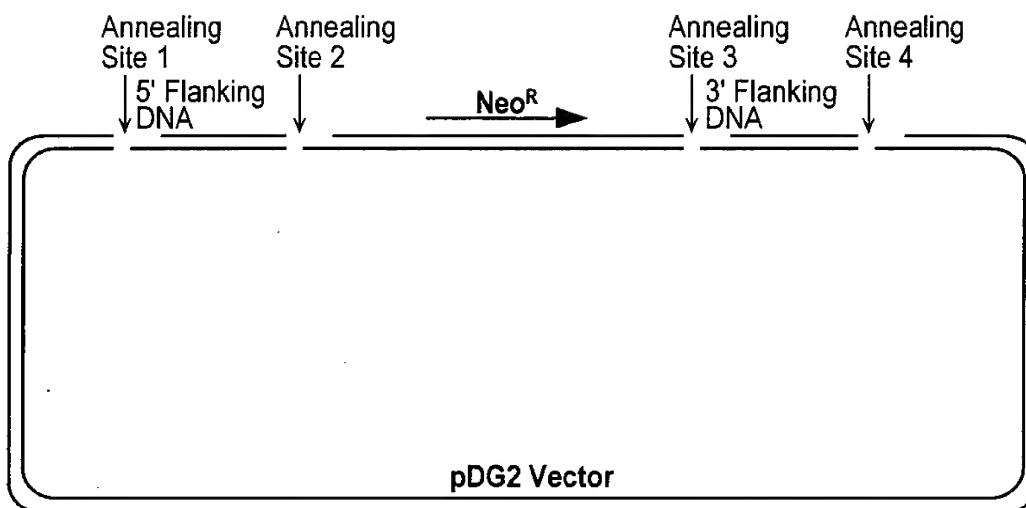


Fig. 6



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O.G. FIG.		SUBCLASS	
CLASS			
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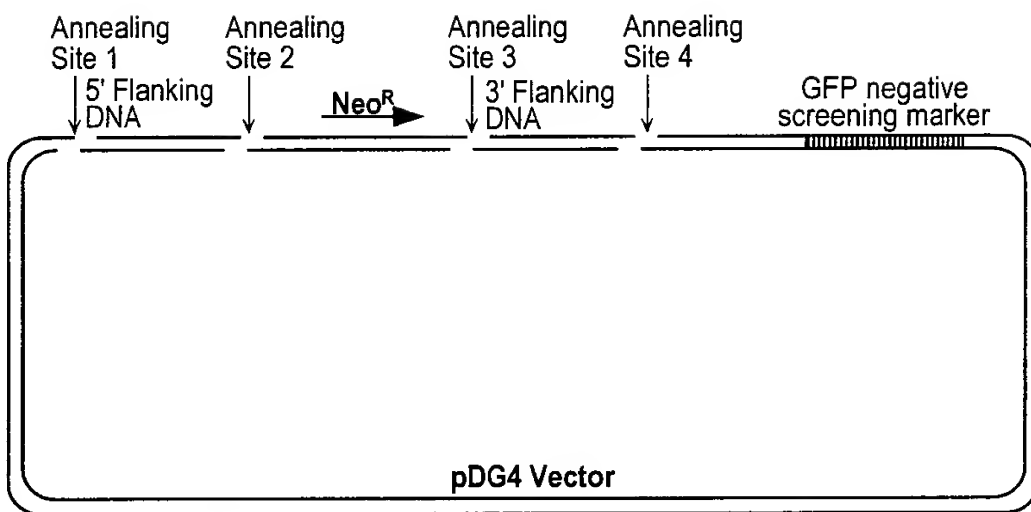
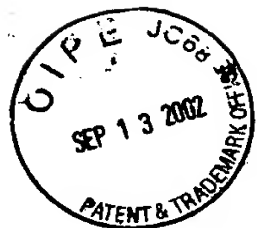


Fig. 7



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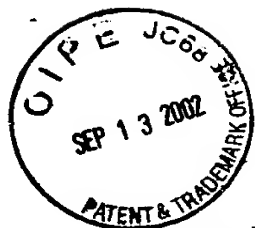
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TGGCTTTGCCAAACAATACTATAACCTTCACTACCGGGGAAGGTATCTCAGACCTCCTCGGGGCCAAGGAGGCAGCTGTG
GACTTCAGCAACTACCACGATGTGAACAGCGTAGAGGAGAGTGAGATCATCTTTGACCTCCTCGGGGACGTTCAAGGAGAACT
TACAGGCTGAGAAATGCACATTCAATGTCTATGAAGAAGCTCTGCTTCTCCTCGGGGCTGACCGAGTGAGCCTGTTCATGTA
CAGGACCCGCAACGGCATCGCCGAGCTGGCCACTAGGCTCTTCAATGTCCACAAGGATGCTGTGCTAGAGGACTGCTTGGTG
ATGCCCCGACTCCGAGATTGTCTTCCCTCTGGACATGGGTGTCTGGGGCCACGTCGCACACTCCAAAAAGATTGCCAATGTCC
CCAACACAGAAGAGGATGAGCATTCTGTGACTTCGTGGACAATCTCACAGAATATCAGACCAAGAACATCCTGGCTTCCCC
CATCATGAATGGGAAGGATGTGGTAGCCATAATCATGGCTGTGAATAAAATAGATGAACCCACTTCACCAAGAGAGATGAA
GAGATTCTTCTCAAGTACCTCAACTTTGTGAACCTGATCATGAAGGTATTCCACCTGAGCTACCTGCACAACCTGTGAGACTC
GTCGCGGCCAGATATTGCTGTGGTCTGGGAGCAAGGTCTTTGAGGAGCTCACGGATATAGAGAGGCAGTTCCACAAGGCCCT
GTACACGGTCCGGGCTTTCTCAACTGTGACAGATACTCCGTAGGACTCTTAGACATGACCAACAGAAGGAATTTTTTGAT
GTGTGGCCAGTTCTGTATGGGCGAGGCTCCAGCTTACTCTGGTCCAGGACTCCAGACGGAAGGGAATTAACCTCTACAAGG
TCATTGACTACATCCTGCACGGCAAAGAAGACATCAAAGTCATCCCGAACCCACCGCTGACCACTGGGCTCTAGTGAGTGG
TCTACCCCTTACGTGGCTCAAAATGGTCTGATCTGCAATATAATGAATGCGCTGCAGAGGACTTTTTTGAATTCAGAAA
GAGCCTCTGGATGAGTCTGGGTGGATGATTAATAATGTACTCTCCATGCCATCGTCAACAAGAAGGAAGAGATCGTCGGCG
TGGCCACATTTTACAACCGCAAGATGGGAAGCCCTTCGACGATATGGACGAGACCTCATGGAGTCTTTGACTCATTTCT
GGATGGTCAGTCTTAAACCCTGACACCTACGAGTCCATGAACAAGCTCGAGAACAGGAAGGATATCTTCCAGGACATCGTG
AAATATCACGTGAAGTGTGATAACGAAGAAATCCAGAAGATCTTGAAAACAGAGAGGTGTACGGCAAAGAGCCGTGGGAAT
GCGAGGAGGAGGAGCTGGCTGAGATCCTGCAAAGAGAATTCAGACGCGGAGTCATACGAAATCAACAAGTTCCACTTCAG
CGACCTGCCACTCACGGAGCTGGAGCTGGTGAAGTGCAGCATCCAGATGTACTACGAGCTCAGAGTGTGGGACAAGTTCCAC
ATCCCGCAAGAGGCCCTGGTGCCTTCTATGTATTCGCTAAGCAAAGGCTACCGGAGAATCACTTACCACAACCTGGCGGCATG
GCTTCAACGTGGGGCAACCATGTTCTCTTGTGTTGACAGGAAAGCTGAAACGGTACTTCACTGATCTAGAGGCCTTTGGCC
ATGGTCACTGCTGCCTTCTGTATGACATCGACCACAGAGGCACGAACAACCTCTACCAGATGAAATCAGAAACCCCTGG
CCAAGCTCCATGGGTCTCCATCTTGGAAAGGCATCATTGGAGTTTGGCAAACACTCCTGAGAGATGAGAGCCTGAATAT
CTTCCAGAACCTGAATCGCCGCGAGCATGAGCACGCGATCCACATGATGGACATCGCGATCATTTGCCACAGACCTTGCTTG
TATTTCAAGAAAAGGACCATGTTCCAGAAGATTGTGGATCAGTCAAAGACATATGAGAGTACCCAGGAGTGAGCCAGTACA
TGATGCTGGAGCAGACACGGAAGGAATTTGTGATGGCCATGATGATGACCGCTGTGATCTCTCAGCCATCACCAAACCTTG
GGAGGTACAGAGCAAGGTGGCTCTGCTGGTGGCTGCTGAATTCGGGAGCAAGGTGACCTGGAGCGCACAGTGCTGCAGCAG
AATCCCATTCCCATGATGGACAGAAACAAGGCGGATGAGCTCCCCAAGCTTCAAGTCGGCTTCATCGACTTTGTGTGCACTT
TTGTCTATAAGGAGTTCTCCCGATTTCATGAGGAGATTACACCCATGCTGGATGGGATCACTAACAACCGCAAGGAATGGAA
GGCGCTGGCTGATGAGTACGAAGCCAAGATGAAGGCCCTGGAGGAGGAGAAGCAGAAGCAGCAGGCAGCCAAGCAAGCTGCT
TCCGGGAACCAAGCCAGGAGGGAACCCACTCCAGGGTGCACCTGCATCTAAGTCTCTGTTGCATCCAGTAGCTGACTGCACCTGC
AGCAGGGCACAGCCCTCAGGAAGGAGGAGGTACCCCTGGCACTGGACAGTTAAAGAACCAGGAGCTTGGAAAGTGGTGGCAAA
CACAGCAGGCATCTATATCATCAAATGGTCTTAGACATTGGTTCTGTCTGTCTGTCTGTCTGTCTGTCTGTCTGTCTGTCTGT
TCTGTTCTGTCTGTCTGTCTGTCTGTCTGTCTGTCTGTCTGTCTGTCTGTCTGTCTGTCTGTCTGTCTGTCTGTCTGTCTGT
GACTGGGCTGGCCTCAAACCTCACAGGCCTCCACCTGCCTCTGTGTCTGTCTGTCTGTCTGTCTGTCTGTCTGTCTGTCTGT
GGGACTTAGAGATTGTGTTTAATTTCTAAAAAGTCTATCGAGTCTAGCCTAATATTTCTAGACTTCATATACTGACTTGATAAT
TTTTTGTCTTATAATGCTTGTAAATTTCTATAAGCTTTTTTAACTTAGTGTTTTATTATAAAAGTGTTCGCTAATTTCCAAA
AGTACAGAATTATACGGAATTC

(SEQ ID NO:19)

Fig. 8A

APPROVED	O.G. FIG.	SUBCLASS
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BY		
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Targeting Vector (5' arm; 200 bp flanking neo insert):

GGAGGTAGAAAAGTTCCTGGATTCAAATATTGGCTTTGCCAAACAGTACTATAACTTTCACTACCGGGGGAAGGT
CATCTCAGACCTCCTCGGGGCCAAGGAGGCAGCCGTGGACTTCAGCAACTACCACGATGTGAACAGCGTAGAGGA
GAGTGAGATCATCTTTGACCTCCTGCGGGACGTTTCAGGAGAACTTACAGG
(SEQ ID NO:20)

Targeting Vector (3' arm; 200 bp flanking neo insert):

TGTCGTGGGCCACGTCGCACACTCCAAAAAGATTGCCAATGTCCCCAACACAGAAGAGGTACGCTCTCCCCATAA
GATGGATGTACGAATGCACTGTTCCCTGGGGTTCTGGAGTCCAAGCTGGCTGGGCTGTTGCTGGCCACCAAACCT
GGGCTAGTCATAGCACGATACCACTCTCTATTTATAAAAAATACTTAGAA
(SEQ ID NO:21)

APPROVED BY DRAFTSMAN	O.G. FIG.	SUBCLASS
	CLASS	

Fig. 8B